MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

# Veolia ES Oak Ridge Sanitary Landfill
# Information Sheet

September 2010

## History

Veolia ES Oak Ridge Sanitary Landfill, Permit Number 0118911, first permitted in 1975 (permitted as West County Disposal LTD Sanitary Landfill, also known as Superior Oak Ridge Sanitary Landfill and Onxy Oak Ridge Sanitary Landfill), is located in Valley Park, St. Louis County. The facility is owned by Veolia Environmental Services Solid Waste Midwest, LLC. The landfill disposal area is approximately 106.6 acres in size and is divided into two (2) sections: the North Section (52.2 acres), which was officially closed in 1992, and the South Section (54.4 acres), which is still actively accepting waste. Between 1985 and 1990, a limited landfill gas collection and gas monitoring systems were installed at the landfill. A gas control system of seven wells constructed in soil and rock along the west side of the landfill were constructed, and placed into operation in 1987, to address stressed vegetation in Castlewood State Park. The gas collection system and the gas monitoring system has been expanded to include 85 gas collection wells and 34 gas monitoring locations at the landfill. The gas collection system has an exterior (out of waste) collection system and an interior (in waste) collection system.

## Methane Migration and Monitoring Wells

In response to ongoing methane violations, the Department issued Veolia ES Oak Ridge Sanitary Landfill a Notice of Violation (NOV), dated September 2010. The following gas monitoring wells have exceeded the regulatory limit for methane at the point of compliance boundary within the past year: GMP 02 and GMP 08. A map showing the location of the gas monitoring wells is attached.

## Summary of Methane Gas Activity at Site

Oak Ridge Sanitary Landfill's gas collection system and monitoring system dates back to the 1980s when an active (out of waste) gas extraction system was installed on the west side of the landfill to address the migration of methane onto Castlewood State Park property. In 1996 the Solid Waste Management Program (SWMP) approved a gas collection system for the North Section of the landfill consisting of 21 gas extraction wells. In 1998 the SWMP approved a gas monitoring plan for the landfill consisting of 27 gas monitoring wells spaced around the landfill to monitor for the presence of methane gas migrating from the landfill. Through the years, the number of gas extraction

wells for Oak Ridge's gas extraction system has increased to 85 gas extraction wells while the number of gas monitoring points that are being monitoring has increased to 34. A full time gas technician is employed at the site to manage the methane gas extraction system, to perform maintenance on the system and to monitor the gas monitoring system. When the Chrysler automobile plant was operating, landfill gas was piped over to the plant to supplement the plant's energy use.

The permittees of the landfill have been proactive in the response to gas migration at the site. In the past, houses in the Elm Street Crossing neighborhood to the north of the landfill were screened for the presence of methane. At the time, no methane was detected in any of the homes.

If a property owner receives a notification letter from a landfill, they are being sent the letter as a precautionary measure to ensure they are aware of the potential for landfill gas migration in the area. Landfill gas is a term for a mixture of gases generated during the decomposition of waste at a landfill and includes methane ($CH_4$), carbon dioxide ($CO_2$) and trace constituents of many other contaminants. The migration of methane from a landfill is a concern because methane is explosive within a certain range of concentrations. Methane is a colorless and odorless gas. The department encourages property owners or tenants to be aware of the potential for methane migration in the area.

The department's SWMP will continue working with Veolia Environmental Services Solid Waste Midwest, LLC to develop and implement a remedial system that reduces methane concentrations in monitoring wells at the property boundary and controls it on-site.

## For More Information

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